

## REMARKS

By this amendment, claims 21-25 are added to place this application in condition for allowance. Currently, claims 8-11 and 20-25 are before the Examiner for consideration on their merits.

First, claims 21-23 are added to further define the chemical conversion treatment in terms of the absence of ammonium and silicate ions. No new matter is introduced by this amendment. That is, Applicants, at the time of filing this application, were in possession of the fact that neither ammonium ions nor silicate ions were used in the chemical conversion treatment described in the specification.

Claim 24 defines a rinsing and drying step, with claim 25 defining the chemical conversion reaction that occurs as part of the formation of the chemical conversion film.

The Examiner's attention in this regard is directed to a number of parts of the specification, wherein the intent of the inventors in terms of the make-up of the chemical conversion treatment is clear. First, page 6, lines 2-11 describes the addition of potassium as an additive to a chemical conversion treatment liquid. The liquid is limited in the claims as containing zinc and phosphoric acid or manganese and phosphoric acid, and support for this is found on page 5, lines 24-26. These two different types of liquids are further discussed on page 8, lines 22-28. Examples 1-4 further define the types of liquids, with Examples 1 and 3 defining a zinc phosphate liquid and

Exemplified 2 and 4 defining a manganese phosphate liquid. Each of the liquids of the examples uses potassium tetraborate.

When reviewing the specification, it is clear that the intent of the inventors is to use a known chemical conversion treatment, see page 4, line 28, wherein this is admitted. Example 1 also indicates that a commercially available zinc phosphate chemical conversion liquid was used.

One contribution of the invention is the use of potassium, which produces an excellent effect as described on page 6, line 2 to page 7, line 5. There is no mention of the need for silicate or ammonium ions anywhere in the specification. In addition, the Examiner's own prior art, i.e., the Metals Handbook citation, explains zinc phosphate and manganese phosphate chemical conversion coatings but makes no mention of the need for ammonium and silicate ions.

This disclosure is contrasted with the teachings of Esler, which never mentions anything about a chemical conversion coating. Moreover, Esler seeks to form a clear coating, and as demonstrated in the interview with Examiner Zheng, forming a chemical conversion coating on Cr steel forms a tinted film, which is the opposite of the aim of a clear coating of Esler. In addition, Esler requires a number of ions, including silicate and ammonium, in order to produce the desired clear coating.

First, it is true that any claim limitation must have a basis in the specification as originally filed to meet the standards of 35 U.S.C. § 112, first

paragraph. However, the MPEP says in Section 2173.05(i) that a negative limitation does not require a literal basis in the specification to be supported by the original specification. Moreover, this MPEP Section points to MPEP Sections 2163 to 2163.07(b) and their analysis regarding an adequate written description for new matter issues.

Referring to MPEP Section 2163.02, the test for written description is "whether the description clearly allows persons of skill in the art to recognize that he or she invented what is claimed." The question that the addition of new claims 21-23 raises is whether the methods of claims 21-23, wherein a chemical conversion treatment is conducted in the absence of ammonium and/or silicate ion, would be recognized by one of skill in the art as an invention of the original disclosure.

Taking the fact that the specification and Metals Handbook, both being concerned with chemical conversion film making, make no mention of the need for silicate or ammonium ions, and the fact that Esler makes no mention of a chemical conversion film and uses a coating solution which is entirely different from the one disclosed in Metals Handbook means that Applicants did not ever intend to include ammonium and silicate ions in the chemical conversion film liquid. This translates into the ability to exclude these components from the claimed method and the addition of claims 21-23 does not introduce new matter into the application.

Turning back to the rejection, Applicants reiterate the previously-made arguments that Esler does not teach a conversion film coating. In this regard, attached herewith are photographs (Exhibit A) showing the difference between the invention and Esler. Figures 1 and 2 show the film of the invention on a 1.5% Cr steel. Figures 4-6.6 show the film of Esler on 13% Cr Steel. A comparison of the figures reveals that the coatings of the invention and Esler are not the same and the position of inherency cannot hold up in light of this comparison. More particularly, the coating of Esler, once applied, is removed with rinsing, whereas, the chemical conversion treatment of the invention produces a coating, which is not removed by rinsing. Exhibit B is a second set of Figures 1-4, which expand the Esler testing to include 0.5% Cr, 1.5% Cr, and 5% Cr. It should be noted that Figures 1 and 4 are duplicates of the data found in Exhibit A.

Even if the Examiner were to maintain the rejection of claim 8, Esler cannot establish a *prima facie* case of obviousness against claims 21-23. Esler requires the presence of silicate and/or ammonium ions. Claims 21-23 exclude the presence of these ions and it cannot be said that Esler teaches a chemical conversion process as defined in these claims. As shown in Table III of Esler, each coating solution has ammonium ions and silicate ions and these ions (required in Esler) are now excluded from claims 21-23. Therefore, Esler does not teach a coating solution that can be considered to

be the same as that claimed and the position of inherency fails for claims 21-23. Thus, these claims are separately patentable over Esler.

Metals Handbook does not remedy the failings in Esler when considering claims 21-23. Metals Handbook is used to allege that modifying Esler to use the temperatures and times in the claims is obvious since Metals Handbook teaches chemical conversion coatings and control of time and temperature. Regardless of how the times and temperatures are controlled in the Esler process, the process is still not the same as that claimed due to the presence of the negative limitations in the claims and the flaw in the inherency stance remains.

In light of the above, it is submitted that Esler and the Metals Handbook do not render claim 8 obvious based on the fact that the coating of Esler is not the same as that produced when practicing the method of claim 8. Second, claims 21-23 are separately patentable over the prior art based on the fact that the Esler liquid is not the same as that used in the method of these claims and since the coating liquid of Esler is not the same, the Examiner cannot assume that the film formed in Esler is a chemical conversion film that is required by the claims.

Claim 25 is also separately patentable over Esler since it defines a chemical conversion reaction as part of the claimed method. The Figures discussed above demonstrate that the film of Esler once applied to a Cr steel is

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removed after rinsing. This reflects an absence of the product of a chemical reaction as required by claim 24.

Accordingly, the Examiner is respectfully requested to examine this application and pass all pending claims onto issuance.

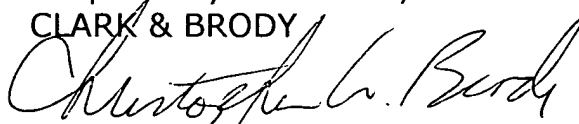
If the Examiner believes that an interview would be helpful in expediting the allowance of this application, the Examiner is requested to telephone the undersigned at 202-835-1753.

Again, reconsideration and allowance of this application is respectfully requested.

A petition for a two month extension of time is made. A check in the amount of \$490.00 is enclosed to cover the cost of the petition fee.

Please charge any fee deficiency or credit any overpayment to Deposit Account No. 50-1088.

Respectfully submitted,  
CLARK & BRODY



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